

REMARKS

Claim 1 is currently amended. Claim 12 is canceled.

Support for the amendment to Claim 1 pertaining to "having a weight average particle diameter of 48 to 50  $\mu\text{m}$ " is found on page 19, line 26 and page 24, lines 26 of the present Specification. Support for the amendment to Claim 1 reciting "a resin layer comprising a crosslinked silicone resin" is found in Example 1, which bridges pages 18 and 19.

Since claims 7-8 have been withdrawn from consideration, claims 1-6 and 9-11, and 13-20 will be active upon entry of the amendment. No new matter will be added upon entry of the amendment.

The rejection of Claims 1, 4, 6, 13, and 17-20 under 35 U.S.C. § 102(e) over U.S. Patent No. 6,534,232 (US '232) is respectfully traversed.

The rejection of Claims 1, 4, 6, 13, and 17-20 under 35 U.S.C. § 102(b) over JP 2001-027829 (JP '829) is respectfully traversed.

The rejection of Claims 2, 3, 5, 6, and 9-14 under 35 U.S.C. § 102(e) over US '232 is respectfully traversed.

The rejection of Claims 2, 3, 5, 6, and 9-14 under 35 U.S.C. § 102(b) over JP '232 is respectfully traversed.

It is noted that US '232 claims the benefit of priority to JP Patent Application No. 11-128879 filed on May 10, 1999 and published as JP '829 on January 30, 2001.

US '232 describes a resin layer containing crosslinked silicone resin. US '232 further describes a magnetite core material "SM-400" having a weight average particle diameter of 44  $\mu\text{m}$  (see US '232, col. 10, *ll.* 1-4). Additionally, inspection of the text on page 5 of JP '829 shows that "SM-400" is employed, and at least from this description it would appear that the same particle size is described (p. 5, col. 7, *l.* 50).

This is in contrast to the presently claimed invention, in which the core particles have a weight average particle diameter of 48 to 50  $\mu\text{m}$ .

Consequently, neither US '232 nor JP '829 anticipates the presently claimed invention.

It is requested that the Examiner withdraw these two rejections.

It is further believed that the claimed invention is unobvious over these these references.

There is no suggestion that would lead one of ordinary skill to believe that the combination of the core particle and CBDN size, as claimed, would provide a developer system with the unexpected results as realized in the present Specification.

The Examiner's attention is directed to the data on page 28 of the present Specification, as presented in Table 4, which is reproduced below.

Example No.	Number average particle diameter of carbon ( $\mu\text{m}$ )	Specific resistance of carrier ( $\Omega \cdot \text{cm}$ )	Image Density	Rank of reproducibility of fine line image	Others
1	0.04	$2.0 \times 10^{13}$	1.41	4	No problems
2	0.04	$1.5 \times 10^{13}$	1.45	5	No problems
Comp. 1	0.007	$7.9 \times 10^{15}$	1.19	4	Edge effect
Comp. 2	0.16	$5.0 \times 10^9$	1.50	3	White spots

Inspection of the data imparts a degree of appreciation for the fact that the developer system comprising the carrier of the present invention provides improvement in the resultant image density and reproducibility of a fine line image.

Additionally, inspection of the data presented in Durability Tests I and II (pages 22-23) and Figs. 1 and 2, see below, show the superiority of the developer system comprising the claimed carrier. In the case of developer (I) (see page 21), an additional 20,000 copies may be obtained, and reduced carrier deposition is observed when compared to conventional developers (page 23, lines 1-5, Fig. 1). While in the case of developer (II), "the recovery and recycling of the carrier as well as the toner gave significant [improvement] in prevention of background stains throughout the reproduction of 300,000 copies (page 23, line 34 – page 24, line 3, Fig. 2). These aspects are not at all suggested in either US '232 or JP '829.

FIG. 1

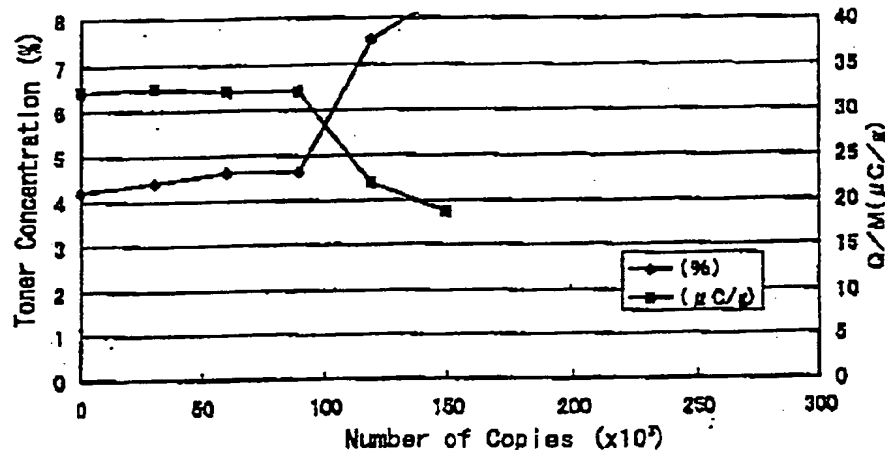
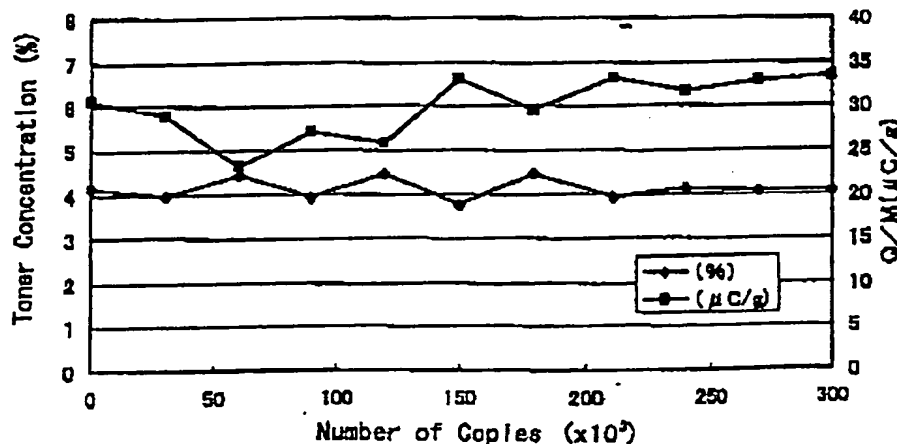


FIG. 2



It is kindly requested that the Examiner recognize the superiority of this material and determine that this substantial improvement is an adequate indicator of unobvious in view of the disclosures of US '232 and JP '829.

Rejections of Claims 1, 6, 13-15, 17, and 20 under 35 U.S.C. § 102(b) over U.S. Patent No. 5,849,448 (US '448) and Claims 1-6 and 11-20 under 35 U.S.C. § 103(a) over US '448 in view of U.S. Patent No. 5,204,204 (US '204) and further in view of Handbook of Imaging Systems, to Diamond, pp. 162-170 and 222-224 are respectfully traversed.

The combined references do not describe or suggest the presently claimed invention.

US '448 describes a resin layer (i.e., matrix resin) containing "straight silicone resins containing organosiloxane linkages or modified products thereof" (col. 6, *ll.* 25-27), but US '448 does not describe crosslinking the same.

Consequently, neither US '448 does not anticipate the presently claimed invention.

It is kindly requested that the Examiner withdraw this rejection.

In the matter of obviousness, it is believed that the claimed invention is unobvious over either US '448 or the combination of US '448, US '204 and Diamond (hereinafter "the combined references").

Like US '232, neither US '448 nor the combined references provide a suggestion that would lead one of ordinary skill to believe that the combination of the core particle and CBDN size, as claimed, would provide a developer system with the unexpected results as realized in the present Specification.

The reasons for this position are stated above. There is simply no suggestion that these types of improvements could be realized. Applicants ask that the Examiner recognize the differences in the claimed invention and the improvements provided therefrom, and deem the presently claimed invention to be unobvious over US '448 and the combined references.

The Office's request for further evidence is now believed to be moot in view of the amendment to Claim 1.

Applicants thank the Examiner for pointing out the potential objection to Claim 12. Upon entry of the amendment, Claim 12 will be canceled.

Applicants have elected Group I (Claims 1-6). Should the Examiner determine that the elected claims are allowable, then it is respectfully requested that the Examiner permit rejoinder of the process and apparatus claims that include all the limitations of the allowed product claim. If the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes Claims to distinct or independent inventions.

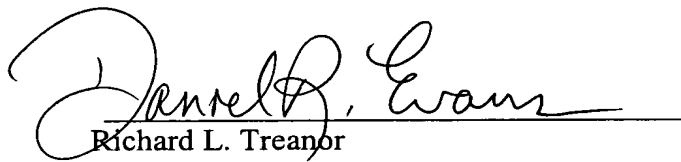
It is believed that the claims are in a condition for allowance. An early and favorable indication is earnestly solicited. Should the Examiner deem that a personal or telephonic interview would be helpful in advancing this application toward allowance, he or she is encouraged to contact Applicant's undersigned representative at the below-listed telephone number.

Respectfully submitted,

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